

AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions; and listings, of claims:

1. (Currently Amended) A system for use in a mobile communications network having a plurality of cell sites, comprising:  
an interface adapted to communicate with a base station system in a cell site over a network; and  
a controller adapted to transmit and receive data through the interface over the network with the base station system according to a packet-switched protocol.
2. (Original) The system of claim 1, wherein the packet-switched protocol comprises a connectionless, packet-based protocol.
3. (Original) The system of claim 1, wherein the packet-switched protocol comprises an Internet Protocol.
4. (Original) The system of claim 1, wherein the interface and controller comprise elements of a General Packet Radio Service system.
5. (Original) The system of claim 4, wherein the network comprises a Gb network.
6. (Original) The system of claim 5, further comprising a serving General Packet Radio Service support node comprising the interface and the controller.
7. (Original) A node for use in a mobile communications network having a system controller, the node comprising:  
one or more radio transceivers adapted to communicate with mobile stations; and  
a module coupled to the one or more radio transceivers and adapted to communicate with the system controller according to a packet-switched protocol.

8. (Original) The node of claim 7, wherein the packet-switched protocol comprises an Internet Protocol.

9. (Original) The node of claim 7, wherein the module is adapted to communicate data packets, each packet containing addresses identifying the node and the system controller.

10. (Original) The node of claim 9, wherein each packet contains Internet Protocol addresses.

11. - 14. (Cancelled)

15. (Currently Amended) A method of communicating in a mobile communications system having a ~~cell-site~~ base station system, a system controller, and an interface between the ~~cell-site~~ base station system and the system controller, the method comprising:

transmitting and receiving data packets over the interface between the base station system and system controller according to a packet-switched protocol.

16. (Original) The method of claim 15, wherein the transmitting and receiving comprise transmitting and receiving Internet Protocol data packets.

17. (Original) The method of claim 15, wherein the transmitting and receiving comprise transmitting and receiving over a Gb interface.

18. (Currently Amended) A serving General Packet Radio Service (GPRS) support node for use in a mobile communications system having ~~cell-sites~~ base station systems, comprising:

an interface to one or more networks coupled to the ~~cell-sites~~ base station systems, the interface comprising a packet-switched element to manage communication ~~of packet-switched data packets to the cell-sites~~ according to a packet-switched protocol over a network between the GPRS support node and at least one of the base station systems.

19. (Original) The serving General Packet Radio Service support node of claim 18, wherein the packet-switched element comprises an Internet Protocol element.

20. (Original) The serving General Packet Radio Service support node of claim 18, further comprising a User Datagram Protocol transport component to manage connections over the network.

21. (Original) The serving General Packet Radio Service support node of claim 18, further comprising a network services layer to transport data units containing signaling and bearer traffic over the network.

22. - 39. (Cancelled)

40. (Previously Presented) The system of claim 1, wherein the interface comprises a network layer to manage communications of packets over the network, and a transport layer to manage connections over the network.

41. (Previously Presented) The system of claim 40, wherein the controller comprises a network services layer to transport packets through the transport and network layers.

42. (Currently Amended) The system of claim 41, wherein the network layer comprises an Internet Protocol layer to communicate over a Gb network with an Internet Protocol layer of the base station system.

43. (Previously Presented) The system of claim 42, wherein the transport layer comprises a User Datagram Protocol layer.

44. (Previously Presented) The system of claim 43, wherein the network services layer comprises a General Packet Radio Service network services layer.

45. (Previously Presented) The system of claim 2, wherein the network comprises a Gb network.

46. (Previously Presented) The node of claim 7, wherein the packet-switched protocol comprises a connectionless, packet-based protocol.

47. (Previously Presented) The node of claim 46, wherein the module is adapted to communicate through a Gb interface to the system controller according to the connectionless, packet-based protocol.

48. (Previously Presented) The method of claim 16, wherein the transmitting and receiving comprises transmitting and receiving Internet Protocol data packets over a Gb interface.

49. (Currently Amended) The serving General Packet Radio Service support node of claim 19, wherein the Internet Protocol element is adapted to manage communication of Internet Protocol packets to an Internet Protocol layer in the call-site at least one base station system over a Gb interface.

50. (New) The node of claim 7, further comprising an Internet Protocol layer to communicate over a Gb network with the system controller according to an Internet Protocol.

51. (New) The method of claim 15, wherein transmitting and receiving data packets comprises an Internet Protocol layer in the system controller transmitting and receiving Internet Protocol packets over a Gb network with an Internet Protocol layer in the base station system.